

IN THE UNITED STATES DESIGNATED/ELECTED OFFICE

107567748

International Application No. : PCT/EP2004/007779
 International Filing Date : 14 July 2004 (14.07.2004)
 Priority Date(s) Claimed : 11 August 2003 (11.08.2003)
 Applicant(s) (DO/EO/US) : Katrin KOEHLER, et al.

Title: IMMOBILISABLE N-HETEROCYCLIC CARBENES

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

Timing and Fees

- Under 37 C.F.R. § 1.97(b), no fee or statement is required for filing this information disclosure statement is filed:
 - within three months of the filing date of a national application other than a CPA under § 1.53(d);
 - within three months of the actual filing date of the national phase of a PCT application; OR
 - before the mailing of a first substantive office action (including after filing of an RCE).
- Under 37 C.F.R. § 1.97(c), this information disclosure statement is filed after the periods specified in 37 C.F.R. § 1.97(b), but before the mailing date of:
 - a final rejection under 37 C.F.R. 1.113;
 - termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P. § 609(B)(2); OR
 - a notice of allowance under 37 C.F.R. § 1.311; and

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is accompanied by:

- the statement as specified in 37 C.F.R. § 1.97(e) set out below; OR
 - a check covering the fee of \$180.00 under 37 C.F.R. § 1.17(p).
- Under 37 C.F.R. § 1.97(d), this information disclosure statement is filed after the mailing date of the following actions which have not been withdrawn:

- a final action under 37 C.F.R. § 1.113;
- termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2);
- OR a notice of allowance under 37 C.F.R. § 1.311;

AND is filed on or before payment of the issue fee; AND is accompanied by:

the statement as specified in 37 C.F.R. § 1.97(e) as set forth below, and the fee of \$180.00 under 37 C.F.R. § 1.17(p).

Statements Under 37 C.F.R. 1.97(e)

- Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application having a mailing date not more than three months prior to the filing date of this information disclosure statement; or
- No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned attorney after making reasonable inquiry, no item of information contained in this information disclosure statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing date of the information disclosure statement.

Cited Materials

- Copies of materials listed but not attached were cited in benefit (35 U.S.C. § 120) ancestor application Serial No. _____, on Form 892 by the Examiner and/or Form 1449 by the applicant; see 37 C.F.R. § 1.98(d).
- Copies of materials listed but not attached were cited in an international search report dated November 24, 2004.
- Not required by 37 CFR § 1.98.
- Copies of the materials listed are attached (except for the foregoing).

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Non-English Language References

An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).

A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below:

X = document of particular relevance when it is taken alone

Y = document of particular relevance when it is combined with another such document

A = document defining the general state of the art

O = non-written disclosure

P = intercalated document

T = document cited to understand the theory or principle underlying the invention

E = patent document which has the benefit of a date earlier than the filing date and which was published only on or after this filing date

D = cited in the application

L = cited for another reason

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Translation of other relevant information on foreign search report

In the search report, "Seite" means page, "Seiten" means pages, "Verbindungen der Formel" means Figure of formula, "Beispiele" means examples, and "das ganze Dokument" means the entire document, "Spalte" means column, "Zeile" means line, "Abbildungen" means claims, "Anspruch" means example, "Zusammenfassung" means summary, and "Tabelle" means table, and "Tabellen" means tables "in der Anmeldung erwähnt" means cited in the application, "Schema" means scheme, "und" means and, "Absatz" means break, "Abbildung" means figure.

Other InformationPayment of Fees Due (If Any):

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Please charge to Deposit Account No. 13-3402 \$ _____ for the fee identified above.

WF5 Rec'd PCT/PTO 10 FEB 2006

The Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose. **10/567748**

Respectfully submitted,



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Attorney Docket No.: MERCK-3131

Date: February 10, 2006

AJZ:ssr

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Complete if Known <i>10/5677</i>			
Application Number		USNP of PCT/EP2004/00779	
Filing Date		14 July 2004 (14.07.2004)	
First Named Inventor		Katrin KOEHLER, et al.	
Group Art Unit		unknown	
Examiner Name		unknown	
Sheet	1	of	2
		Attorney Docket Number	
		MERCK-3131	

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. Number refers to English language corresponding family member.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

2

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2

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First Named Inventor	Katrin KOEHLER, et al.
Group Art Unit	unknown
Examiner Name	unknown

Attorney Docket Number MERCK-3131

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. T ²
	007	B. CETINKAYA ET AL: "SYNTHESIS AND IMMOBILIZATION OF N-HETEROCYCLIC CARBENE COMPLEXES OF RU(II): CATALYTIC ACTIVITY AND RECYCLABILITY FOR THE FURAN FORMATION" JOURNAL OF MOLECULAR CATALYSIS A, CHEMICAL, Bd. 184, Nr. 1-2, 2002, Pages 31-38, XP002303852
	008	A.A. DANOPoulos ET AL: "SYNTHESIS AND STRUCTURAL CHARACTERISATION OF STABLE PYRIDINE-AND PHOSPHINE-FUNCTIONALISED N-HETEROCYCLIC CARBENES" CHEMICAL COMMUNICATIONS, Nr. 5, 2002, Pages 482-483, XP002303853
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	011	W.A. HERMANN ET AL: "HETEROCYCLIC CARBENES: A HIGH-YIELDING SYNTHESIS OF NOVEL, FUNCTIONALIZED N-HETEROCYCLIC CARBENES IN LIQUID AMMONIA" CHEMISTRY - A EUROPEAN JOURNAL, Bd. 2, Nr. 12, 1996, PAGES 1627-1636, XP002303664
	012	C. BOLM ET AL: "THE FIRST PLANAR-CHIRAL STABLE CARBENE AND ITS METAL COMPLEXES" ORGANOMETALLICS, Bd. 21, Nr. 4, 2002, PAGES 707-710, XP002303854
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	014	A.A. DANOPoulos ET AL: "C-H ACTIVATION WITH N-HETEROCYCLIC CARBENE COMPLEXES OF IRIDIUM AND RHODIUM" JOURNAL OF THE CHEMICAL SOCIETY, DALTON TRANSACTIONS, Nr. 16, 2002, PAGES 3090-3091, XP002303856
	015	A.J. ARDUENGO III ET AL: "ELECTRONIC STABILIZATION OF NUCLEOPHILIC CARBENES" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, Bd. 114, Nr. 14, 1992, PAGES 5530-5534, XP002303665

Examiner Signature	Date Considered
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